

Notice of Allowability

Application No.

09/923,627

Examiner

MANSOUR M SAID

Applicant(s)

TAGAWA ET AL.

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/31/04.
2. ☒ The allowed claim(s) is/are 1-20 and renumbered as 1-20.
3. ☒ The drawings filed on 28 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with George W. Hertnell on March 24, 2005.

2. **Please amend claims 1 and 14 as follow:**

IN THE CLAIMS

In claim 1, lines 10-11, please delete " and the sequence of the addressing scan is reversed every one or more display frames", and replace it with -- and the scanning sequence of a plurality scanning line is reversed every one or more display frames for the addressing scan--.

In claim 14, lines 10-11, please delete " and the sequence of the addressing scan is reversed every one or more display frames", and replace it with -- and the scanning sequence of a plurality scanning line is reversed every one or more display frames for the addressing scan--

Allowable Subject Matter

3. Claims 1-20 are allowed.
4. The following is an examiner's statement of reasons for allowance:
5. None of the prior art of the record either singularly or in combination teaches or fairly suggests an image display apparatus, comprising: a display section including picture elements for modulating light transmission or reflection; a driving section for performing an addressing scan of the picture elements in such a manner as to successively change light modulation states of the picture elements in each display frame; and a light emitting section for illuminating the display section, wherein the light emitting section is switched ON-OFF exactly once in each display frame, the addressing scan for the picture elements is performed in the OFF state of the light emitting section in each display frame, and a scanning sequence of a plurality of scanning line is reversed every one or more display frames for the addressing scan.

Cited reference Ge et al. (5,402,243) teach the transmission rate of the LCD therein is proportional to analog input signals. In figs 2 and 10, and 11, display control unit applied pulses each composed of a reset component and a scanning component periodically, including at times t_{n1} , t_{n2} and t_{n3} . These reset and scanning pulses are applied to LCD-by-LCD row controllers as controlled by unit (104). In response to the analog input, LCD column drivers apply three sequential pulses, the transmission rate of a selected pixels addressed by pulses is shown as curve (304). The steady transmission rate in curve is proportional to the amplitude of pulses. In synchronism therewith, EFBL 34 generates red, green and blue pulses of constant width and amplitude during the time period at which the transmission rate of the selected pixel is substantially constant.

However, Ge does not teach the claimed limitation such as "a scanning sequence of a plurality of scanning line is reversed every one or more display frames for the addressing scan".

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Mansour M. Said** whose telephone number is **(703) 306-5411**.

The examiner can normally be reached on Monday through Thursday from 8:30 a.m. to 6:00 p.m. The examiner can also be reached on alternate Friday from 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Shalwala Bipin**, can be reached at **(703) 305-4938**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal


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Drive, Arlington, VA, Sixth Floor (Receptionist)

8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer service Office whose telephone number is (703) 306-0377.

March 24, 2005

Mansour M. Said



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600